

## AMENDMENTS TO THE CLAIMS

Please amend the claims as shown below:

*disclose* 1. (Previously amended) A water dispersible fibrous fabric comprising:  
*fibers* a fibrous substrate, wherein less than about 20% of the fibers comprising the fibrous substrate have a length of about 6-10 mm; and  
*modified* *ion-sensitive* a water-dispersible binder; wherein said binder is an ion-sensitive composition comprising a sulfonate anion modified polymer and a non-crosslinking poly(ethylene-vinyl acetate), wherein the composition is insoluble in a neutral salt solution containing at least about 0.3 weight percent salt, said salt comprising one or more monovalent ions;  
*B5* wherein said binder comprises ~~less than about 25%~~ about 5% to about 65% by weight of said fibrous fabric and said fibrous substrate comprising ~~more than about 75%~~ about 35% to about 95% by weight of said fibrous fabric; and  
wherein the fabric is dispersible in an aqueous environment containing up to about 200 ppm of one or more divalent and/or multivalent ions.

2. (Previously amended) The water dispersible fibrous fabric of Claim 1, wherein said binder comprises from about ~~10-15%~~ 5% to about 35% by weight of said fibrous fabric and said fibrous substrate comprises from about ~~85-90%~~ about 65% to about 95% by weight of said fibrous fabric.

3. (Original) The water dispersible fibrous fabric of Claim 1, wherein said fibers have a length of about 7-9 mm.

4. (Previously amended) The water dispersible fibrous fabric of Claim 1, wherein said fibers have a length of about 8mm.

5. (Original) The water dispersible fibrous fabric of Claim 1, wherein said binder comprises from about 5% by weight to about 25% by weight of said fabric.

6. (Original) The water dispersible fibrous fabric of Claim 1, wherein said binder comprises from about 10% by weight to about 20% by weight of said fabric.

7. (Previously amended) The water dispersible fibrous fabric of Claim 1, wherein the binder is dispersible in water containing from about 15 ppm to about 150 ppm of one or more divalent and/or multivalent ions.

8. (Previously amended) The water dispersible fibrous fabric of Claim 1, wherein the binder is insoluble in a neutral salt solution containing from about 0.3 weight percent to about 5 weight percent salt.

9. (Previously amended) The water dispersible fibrous fabric of Claim 1, wherein the binder is insoluble in a neutral salt solution containing from about 1 weight percent to about 4 weight percent salt.

10. (Currently amended) The water dispersible fibrous fabric of Claim 1, wherein the divalent and/or multivalent ions comprise  $\text{Ca}^{2+}$  ions,  $\text{Mg}^{2+}$  ions,  $\text{Zn}^{2+}$ -ions, or a combination thereof.

11. (Previously amended) The water dispersible fibrous fabric of Claim 1, wherein the monovalent ions comprise  $\text{Na}^+$  ions,  $\text{Li}^+$  ions,  $\text{K}^+$  ions,  $\text{NH}_4^+$  ions, or a combination thereof.

12. (Previously amended) The water dispersible fibrous fabric of Claim 1, wherein the sulfonate anion modified polymer comprises at least one of acrylic acid or methacrylic acid, and one or more alkyl acrylates.

13. (Previously amended) The water dispersible fibrous fabric of Claim 1, wherein the sulfonate anion modified polymer is formed from at least four monomers selected from acrylic acid; 2-acrylamido-2-methyl-1-propanesulfonic acid and the alkali earth metal or organic amine salts thereof; butyl acrylate; and 2-ethylhexyl acrylate.

14. (Previously amended) The water dispersible fibrous fabric of Claim 1, wherein the sulfonate anion modified polymer is formed from at least four monomers selected from acrylic acid; AMPS; NaAMPS; butyl acrylate; and 2-ethylhexyl acrylate.

15. (Previously amended) The water dispersible fibrous fabric of Claim 1, wherein the sulfonate anion modified polymer comprises from about 35 to less than about 80 mole percent acrylic acid; from greater than 0 to about 20 mole percent 2-acrylamido-2-methyl-1-propanesulfonic acid and alkali earth metal or organic amine salts thereof; from greater than 0 to about 65 mole percent butyl acrylate; and from greater than 0 to about 45 mole percent 2-ethylhexyl acrylate.

16. (Previously amended) The water dispersible fibrous fabric of Claim 1, wherein the sulfonate anion modified polymer comprises from about 50 to less than about 67 mole percent acrylic acid; from greater than 0 to about 10 mole percent 2-acrylamido-2-methyl-1-propanesulfonic acid and alkali earth metal or organic amine salts thereof; from about 15 to about 28 mole percent butyl acrylate; and from about 7 to about 15 mole percent 2-ethylhexyl acrylate.

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17. (Previously amended) The water dispersible fibrous fabric of Claim 1, wherein the sulfonate anion modified polymer comprises from about 57 to less than about 66 mole percent acrylic acid; from about 1 to about 6 mole percent 2-acrylamido-2-methyl-1-propanesulfonic acid and alkali earth metal or organic amine salts thereof, from about 15 to about 28 mole percent butyl acrylate; and from about 7 to about 13 mole percent 2-ethylhexyl acrylate.

18. (Previously amended) The water dispersible fibrous fabric of Claim 1, wherein the composition comprises from about 55 to about 95 weight percent of the sulfonate anion modified polymer.

19. (Previously amended) The water dispersible fibrous fabric of Claim 1, wherein the composition comprises from about 65 to about 80 85 weight percent of the sulfonate anion modified polymer.

20. (Previously amended) The water dispersible fibrous fabric of Claim 1, wherein the composition comprises from about 5 to about 45 weight percent of the non-crosslinking poly(ethylene-vinyl acetate).

21. (Previously amended) The water dispersible fibrous fabric of Claim 1, wherein the composition comprises from about 20 15 to about 35 weight percent of the non-crosslinking poly(ethylene-vinyl acetate).

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22. (Previously amended) The water dispersible fibrous fabric of Claim 1, wherein the sulfonate anion modified polymer comprises from about 57 to less than about 66 mole percent acrylic acid; from about 1 to about 6 mole percent AMPS or NaAMPS; from about 15 to about 28 mole percent butyl acrylate; and from about 7 to about 13 mole percent 2-ethylhexyl acrylate; and wherein the composition comprises from about 65 to about 80 weight percent of the sulfonate anion modified polymer and from about 20 to about 35 weight percent of the non-crosslinking poly(ethylene-vinyl acetate).

23. (Previously amended) The water dispersible fibrous fabric of Claim 1, wherein said fibrous material is a nonwoven fabric.

24. (Previously amended) The water dispersible fibrous fabric of Claim 1, wherein said fibrous material will disperse in water after no more than about 60 minutes.

25. (Previously amended) The water dispersible fibrous fabric of Claim 1, wherein said fibrous material will disperse in water after no more than about 20 minutes.

26. (Previously amended) The water dispersible fibrous fabric of Claim 1, wherein said fibrous material will disperse in water after no more than about 10 minutes.

27. (Previously amended) The water dispersible fibrous fabric of Claim 1, wherein after up to about 60 minutes said fibrous material breaks up into multiple pieces each having an average size of less than about 50% relative to its pre-dispersed size.

28. (Previously amended) The water dispersible fibrous fabric of Claim 1, wherein after up to about 60 minutes said fibrous material breaks up into multiple pieces each having an average size of less than about 40% relative to its pre-dispersed size.

29. (Previously amended) The water dispersible fibrous fabric of Claim 1, wherein after up to about 60 minutes said fibrous material breaks up into multiple pieces each having an average size of less than about 30% relative to its pre-dispersed size.

30. (Previously amended) The water dispersible fibrous fabric of Claim 1, wherein said fabric is used in a disposable personal care product.  
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31. (Previously amended) The water dispersible fibrous fabric of Claim 30, wherein said personal care product is selected from a wipe, diaper, training pant, swimwear, absorbent underpant adult incontinence product, feminine hygiene product, absorbent pad, wound dressing or bandage.

32. (Previously amended) A disposable absorbent article comprising a water dispersible fibrous fabric, wherein the fabric comprises:

a fibrous substrate, the fibrous substrate comprising less than about 20% fiber fraction of fibers having a length of about 6-10 mm in length; and

a water-dispersible binder comprising a first polymer formed from at least four monomers selected from acrylic acid, 2-acrylamido-2-methyl-1-propanesulfbnic acid and alkali earth metal and organic amine salts thereof, butyl acrylate, and 2-ethylhexyl acrylate; and a second polymer comprising a non-crosslinking poly(ethylene-vinyl acetate); wherein the composition is insoluble in a neutral salt solution containing at least about 0.3 weight percent

salt, said salt comprising one or more monovalent ions;

wherein said fabric is water dispersible in an aqueous environment containing up to about 200 ppm of one or more multivalent ions and a monovalent ion concentration of less than about 0.5% by weight.

33. (Original) The disposable absorbent article of Claim 32, wherein the fibrous substrate is comprised of pulp and synthetic fibers.

34. (Original) The disposable absorbent article of Claim 32, wherein the less than about 20% fiber fraction of fibers having a length of about 6-10 mm in length are synthetic fibers.

35. (Original) The disposable absorbent article of Claim 32, wherein at least about 80% of the fiber fraction of the fibrous substrate comprises pulp and less than about 20% of the fiber fraction of the fibrous substrate comprises synthetic fibers.  
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36. (Original) The disposable absorbent article of Claim 32, wherein about 85-95% of the fiber fraction of the fibrous substrate comprises pulp and about 5-15% of the fiber fraction of the fibrous substrate comprises synthetic fibers.

37. (Original) The disposable absorbent article of Claim 32, wherein about 3-17% of the fibers of the fibrous substrate have a fiber length of about 6-10 mm.

38. (Original) The disposable absorbent article of Claim 32, wherein about 5-15% of the fibers of the fibrous substrate have a fiber length of about 6-10 mm.

39. (Previously amended) The disposable absorbent article of Claim 32, wherein about 15% of the fibers of the fibrous substrate have a length of about 8 mm.

40. (Previously amended) The disposable absorbent article of Claim 39, wherein the fibers of the fibrous substrate having a length of about 8 mm are synthetic fibers.

41. (Previously amended) The disposable absorbent article of Claim 32,

wherein said binder comprises less than about 20% by weight of said fibrous fabric and said fibrous substrate comprises more than about 80% by weight of said fibrous fabric.

42. (Previously amended) The disposable absorbent article of Claim 32, wherein said binder comprises about 10-15% by weight of said fibrous fabric and said fibrous substrate comprises more than about 85-90% by weight of said fibrous fabric.

43. (Previously amended) The disposable absorbent article of Claim 32, wherein the article is a personal care product selected from a wipe, diaper, training pant, swimwear, absorbent underpant, incontinence product, feminine hygiene product, absorbent pad, wound dressing and bandage.

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44. (Previously amended) The disposable absorbent article of Claim 32, wherein the first polymer of the water-dispersible binder comprises from about 35 to less than about 80 mole percent acrylic acid; from greater than 0 to about 20 mole percent 2-acrylamido-2-methyl-1-propanesulfonic acid and alkali earth metal or organic amine salts thereof; from greater than 0 to about 65 mole percent butyl acrylate; and from greater than 0 to about 45 mole percent 2-ethylhexyl acrylate.

45. (Previously amended) The disposable absorbent article of Claim 32, wherein the first polymer of the water-dispersible binder comprises from about 50 to less than about 67 mole percent acrylic acid; from greater than 0 to about 10 mole percent 2-acrylamido-2-methyl-1-propanesulfonic acid and alkali earth metal or organic amine salts thereof; from about 15 to about 28 mole percent butyl acrylate; and from about 7 to about 15 mole percent 2-ethylhexyl acrylate.

46. (Previously amended) The disposable absorbent article of Claim 32, wherein the first polymer of the water-dispersible binder comprises from about 57 to less than about 66 mole percent acrylic acid; from about 1 to about 6 mole percent 2-acrylamido-2-

methyl-propanesulfonic acid and alkali earth metal or organic amine salts thereof, from about 15 to about 28 mole percent butyl acrylate; and from about 7 to about 13 mole percent 2-ethylhexyl acrylate.

47. (Previously amended) The disposable absorbent article of Claim 32, wherein the first polymer of the water-dispersible binder is present in an amount from about 55 to about 95 weight percent.

48. (Previously amended) The disposable absorbent article of Claim 32, wherein the first polymer of the water-dispersible binder is present in an amount from about 65 to about 80 85 weight percent.

49. (Previously amended) The disposable absorbent article of Claim 32, wherein the second polymer of the water-dispersible binder is present in an amount from about 5 to about 45 weight percent  
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50. (Previously amended) The disposable absorbent article of Claim 32, wherein the water-dispersible binder comprises from about 20 15 to about 35 weight percent non-crosslinking poly(ethylene-vinyl acetate).

51. (Previously amended) The disposable absorbent article of Claim 32, wherein the first polymer of the water-dispersible binder comprises from about 57 to less than about 66 mole percent acrylic acid; from about 1 to about 6 mole percent AMPS or NaAMPS; from about 15 to about 28 mole percent butyl acrylate; and from about 7 to about 13 mole percent 2-ethylhexyl acrylate; and wherein the composition comprises from about 65 to about 80 weight percent of the first polymer and from about 20 15 to about 35 weight percent of the second polymer.

52. (Previously amended) A wet wipe comprising:  
a fibrous substrate, wherein less than about 20% of the fibers comprising the

fibrous substrate have a length of about 6-10 mm; and

an ion-sensitive water-dispersible binder comprising a sulfonate anion modified polymer and a non-crosslinking poly(ethylene-vinyl acetate), wherein the composition is insoluble in a neutral salt solution containing at least about 0.3 weight percent salt, said salt comprising one or more monovalent ions;

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wherein said binder comprises less than about 25% by weight of said fibrous fabric and said fibrous substrate comprising more than about 75% by weight of said fibrous fabric;

wherein the fabric is dispersible in an aqueous environment containing up to about 200 ppm of one or more divalent and/or multivalent ions; and

wherein after up to about 60 minutes said fibrous material breaks up into multiple pieces each having an average size of less than about 50% relative to its pre-dispersed size.

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Please add the following new Claims 53-56:

53. (New) The water dispersible fibrous fabric of Claim 1, wherein said binder comprises less than about 25% by weight of said fabric.

54. (New) The water dispersible fibrous fabric of Claim 1, wherein said binder comprises from about 5% by weight to about 20% by weight of said fabric.

55. (New) The water dispersible fibrous fabric of Claim 1, wherein said binder comprises from about 10% by weight to about 15% by weight of said fabric.

56. The water dispersible fibrous fabric of Claim 1, wherein the composition comprises from about 75 weight percent of the sulfonate anion modified polymer and about 25% weight percent of the non-crosslinking poly(ethylene-vinyl acetate).

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